Monitoring reinstatement and compaction of backfill materials

CertificateAim

This certificate has been designed to allow the candidate to demonstrate the skills and knowledge required to monitor the reinstatement and compaction of backfill materials. The candidate will be able to monitor the selection and storage of backfill materials, monitor the selection of compaction plant for backfilling operations, monitor the construction of the backfill layer, and monitor the action taken to avoid damage to underground apparatus during backfilling. The candidate will also be able to monitor site safety throughout backfill operations.

Learning Outcome 1	Monitor the selection and storage of backfill materials in footway and carriageway reinstatement

Assessment criteria:

1.1 ensure that materials selected for re-use and imported materials are checked against the range of backfill materials permitted in the current specification

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1.3 ensure that the correct quantities of materials are calculated for use

1.4 ensure that safe arrangements are made for the storage of re-usable and imported materials in accordance with current specifications and procedures

1.5 ensure that safe temporary storage arrangements are made for materials not suitable for re-use in accordance with current specifications and procedures

1.6 ensure that the quantities of materials selected for re-use meet the reinstatement requirements

1.7 check for problems with the selection and storage of backfill materials and confirm the appropriate action required.

6.3	state the methods used to confirm that construction of the backfill layer meets specifications
6.4	state the potential problems with the construction of the backfill layer, and the appropriate remedial action.

Learning Outcome 7	Monitor the action taken to avoid damage to underground apparatus during backfill operations

Assessment criteria:

7.1	ensure that exposed utilities apparatus is identified correctly
7.2	ensure the exposed utilities apparatus is safely supported and protected
7.3	ensure that precautions are taken to minimise the risk of damage to utilities apparatus
7.4	identify damage to underground utilities apparatus and confirm the action required.

Learning Outcome 8	Understand how to monitor the action taken to avoid damage to underground apparatus during backfill operations

Assessment criteria:

8.1	state how to identify the different types of utilities apparatus on site
8.2	identify the different methods of safely supporting and protecting exposed utilities apparatus
8.3	define the potential risks and consequences of damage to utilities apparatus
8.4	state the precautions required to avoid damage to utilities apparatus
8.5	state the potential problems arising from u P š } µ š] o] š] • [‰ ‰ Œ š µ • remedial action.

Learning Outcome 9	Monitor site safety

Assessment criteria:

9.1	ensure that a risk assessment has been carried out
9.2	monitor site operations in accordance with health and safety requirements
9.3	assess site conditions in accordance with health and safety requirements
9.4	ensure that safety equipment is available and fit for purpose
9.5	ensure that safe working practices are followed in line with current relevant specifications
9.6	check for risks to site safety, and confirm the appropriate action required
9.7	ensure that the site is left in a clean and safe condition

Learning Outcome 10	Understand how to monitor site safety

Assessment criteria:

10.1	define the purpose of a site specific risk assessment
10.2	state the health and safety requirements for site operations
10.3	define the health and safety requirements for different site conditions
10.4	define the safety equipment required during site operations and how to ensure that it is fit for purpose

Evidence Requirements / Scope

Some terms, used in the assessment criteria, cover a range of situations, as follows:

1. Materials include:
   (a) Class A Graded Granular
   (b) Class B Granular
   (c) Class C Cohesive Granular
   (d) Class D Cohesive
   (e) Class E Unacceptable.

2. Specifications and procedures include:
   (a) Specification for the Reinstatement of Openings in Highways/Roads
   (b) Health and Safety Guidance 47, Avoiding Danger from Underground Services
   (c) Health and Safety Guidance 150, Health and Safety in Construction
   (d) u v µ (š µ Œ Œ • [} ‰ Œ š] v P ‰ Œ } µ Œ • (} Œ ‰ } Á Œ
   (e) Safety and Street Works and Road Works t A Code of Practice.

3. Safe working practices include:
   (a) safe use of tools and equipment
   (b) use of appropriate PPE (including, as necessary: high visibility jacket or waistcoat, hard hat, ear defenders, gloves, protective footwear, waterproof clothing, eye protection visor or goggles, dust mask)
   (c) use of risk assessment methods to identify and control hazards on site
   (d) precautions to minimise danger or inconvenience to road users
   (e) precautions to minimise danger or inconvenience to site personnel
   (f) precautions to minimise damage to equipment or apparatus.

4. Compaction plant/powered equipment includes:
   (a) vibrotamper
   (b) vibrating plate
   (c) vibrating roller
   (d) percussive rammer
   (e) hand rammer.

5. Measuring equipment